

Spring 4-9-2014

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Recommended Citation

Alalwan, Ali; Dwivedi, Yogesh; and Williams, Michael, "Examining Factors Affecting Customer Intention And Adoption Of Internet Banking In Jordan" (2014). *UK Academy for Information Systems Conference Proceedings 2014*. 3.
<http://aisel.aisnet.org/ukais2014/3>

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EXAMINING FACTORS AFFECTING CUSTOMER INTENTION AND ADOPTION OF INTERNET BANKING IN JORDAN

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Abstract

This study aims to propose and validate a conceptual model demonstrating the main factors predicting customers' intention and adoption of Internet banking in Jordan. The conceptual framework was theorised by integrating factors from the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2): performance expectancy (PE), facilitating conditions (FC), and hedonic motivation (HM) along with perceived risk (PR) and trust (TR) were extracted from Internet banking literature. A self-administrative questionnaire has been employed to collect data from a convenience sample of three hundred and forty-eight Jordanian banking customers (69.6% response rate). By facilitating AMOS 21, a structural equation modelling (SEM) has been conducted to validate the proposed model and examine the research hypotheses. Statistical results approved that all predictors of behavioural intention (BI) have been recognised as significant. TR was the most influential factor predicting BI. This study ended by deliberating the research limitations and future directions.

Keywords: Internet banking, Intention, Jordan, UTAUT2, Adoption.

1. Introduction

With the improvement of the Internet and Wi-Fi technologies, Internet banking has been progressing as an essential part in the banking logistic system (Curran and Meuter, 2007). This innovative channel provides customers with a wide range of financial services, such as balance enquiry, funds transfer, paying bills, stock market, etc. with a higher quality of service at a time and place appropriate to customers, and without any assistance from banking employees (Akinci et al., 2004; Curran and Meuter, 2005; Karjaluoto et al., 2002; Lassar et al., 2005). Cutting labour costs, enhancing service value and quality, attracting new customers, and maintaining the current market share seems to be the primary reasons behind the implementation of this new technology in the banking context (Curran and Meuter, 2007; Nor et al., 2008; Pikkarainen et al., 2004).

There is an attempt to utilise Internet prosperity in Jordan where approximately 55 per cent of the Jordanian population are Internet subscribers (The Gulf Today, 2012), and, under the pressure of competition, eighteen Jordanian banks had implemented Internet banking in their logistic system, and large amounts of money and resources have been projected into this vein (e.g. approximately \$182 million were invested to update Internet banking services) (Alalwan et al., 2013; Al-Majali, 2011; Association of Banks in Jordan, 2010; Migdadi, 2012). However, implementing Internet banking will not be feasible unless customers widely accept it as a full alternative to the traditional encounter (Curran and Meuter, 2007). As a matter of fact, the adoption rate of Internet banking in Jordan is still low; for instance, adopters of Internet banking in Jordan are less than 3.5% of total banking customers (Al-Majali, 2011; Jordanian Department of Statistics, 2011). Jordanian banks are concerned at the low adoption rate of Internet banking by their customers (Abu-Shanab et al., 2010; Alalwan et al., 2013; Al-Majali, 2011).

An understanding of a customer's behaviour in this regard could facilitate the adoption of Internet banking by Jordanian customers. Persuading customers to switch his behaviour from a traditional encounter to use Internet banking is not an easy process (Curran and Meuter, 2007), there is an ongoing need to identify the most important factors hindering or contributing to the adoption of Internet banking in Jordan (Alalwan et al., 2013). Consequently, an empirical and theoretical study in this

regard could alert the Jordanian banks to choose the most suitable marketing strategy that will guarantee effective implementation and adoption of Internet banking.

Nevertheless, there is a scarcity of studies that have addressed this problem in Jordan (Abu-Shanab and Pearson, 2010; Al-Majali, 2011; Al-Qeisi and Abdallah, 2013). While the extended model based on UTAUT has been proposed to examine customers' intention (Abu-Shanab and Pearson, 2010) and actual usage behaviour (Al-Qeisi and Abdallah, 2013), Al-Majali, (2011) extended the TRA to explain Jordanian customers' intention to adopt Internet banking. However, the considerable relationship between behavioural intention and adoption has not been addressed by these studies. In addition, the important interaction relationships such as between trust and perceived risk or facilitating conditions and performance expectancy have been ignored as well. Moreover, the important role of intrinsic motivation has not received any attention from prior studies regarding the Jordanian context. From this perspective, this study is motivated to fill this considerable gap by proposing and examining a suitable and parsimonious conceptual model explaining the fundamental factors predicting behavioural intention and adoption of Internet banking by the Jordanian customers.

The remaining sections of this study are laid out as follows: Section 2 provides an overview of the Internet banking literature; the conceptual model and research hypotheses are presented in Section 3; Section 4 then summarises the research methodology conducted in this study; the finding analyses and discussion follow in Sections 5 and Section 6 respectively; the study's conclusion and main limitations and future research directions are deliberated in Section 7.

2. Literature Review

Internet banking has been extensively addressed by prior researches on online banking (Pikkarainen et al., 2004; Wang et al., 2003). Drawing customers to adopt Internet banking is not easy (Curran and Meuter, 2007); therefore, examining the adoption of Internet banking has received considerable interest over prior, yet relevant, literature (Jaruwachirathanakul and Fink, 2005; Tan and Teo, 2000). Theoretically, several information system models have been adopted to clarify this phenomenon. Fundamentally, the technology acceptance model (TAM) has been formulated to explain customer acceptance of Internet banking by concentrating on two salient factors: perceived ease of use and perceived usefulness (Curran and Meuter, 2005;

Davis, 1989; Eriksson et al., 2005). However, the TAM has been modified and extended by including other factors such as perceived risk and the need for interaction (Curran and Meuter, 2005). Eriksson et al. (2005) also combined trust with both perceived ease of use and usefulness to explain acceptance of Internet banking in Estonia. Similarly, perceived enjoyment, privacy and security, quality of Internet connection, and online information were all proposed beside the TAM constructs by Pikkarainen et al. (2004). An attempt to understand the adoption of online banking in Saudi Arabia by Al-Somali et al. (2009) prolonged the TAM by comprising quality, awareness, trust, social influences, resistance to change, and self-efficacy.

The Decomposed Theory of Planned Behaviour (DTPB) was adopted by Jaruwachirathanakul and Fink (2005) to predict the adoption of Internet banking in Thailand. Comparisons between the three models - DTPB, Theory of Planned Behaviour (TPB), and Theory of Reasoned Action (TRA) were applied by Shih and Fang (2004) so as to identify the best fit model demonstrating Internet banking adoption. Both Tan and Teo (2000) and Liao et al. (1999) combined constructs from the innovation diffusion theory and TPB to test the adoption of Internet banking in Singapore and Hong Kong respectively. Gerrard and Cunningham (2003) built their model, also based on the innovation diffusion theory, to predict the adoption of Internet banking.

Recently, the Unified Theory of Acceptance and Use of Technology (UTAUT) has started receiving interest in the area of Internet banking (Abu-Shanab and Pearson, 2010; Cheng et al., 2008; Martins et al., 2014; Riffai et al., 2012; Yeow et al., 2010). Noteworthy, the UTAUT has been extended by including other factors such as trust, perceived risk, and perceived enjoyment in order to provide a fuller picture about the adoption of Internet banking (Abu-Shanab and Pearson, 2010; Riffai et al., 2012).

It is worth arguing that the prior theories have been originally conducted to investigate technology acceptance from an organisational perspective, which, in turn, will create a concern regarding the applicability of these theories over the customer contexts (Venkatesh et al., 2012). Later in 2012, Venkatesh et al. were successful in modifying their original model by including new constructs: hedonic motivation, price value, and habit which were extracted from marketing and information system literature. This version was named the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2).

With regard to the related literature of Internet banking in Jordan, there are a few studies examining the adoption of Internet banking in Jordan (Abu-Shanab and Pearson, 2010; Al-Majali, 2011; Al-Qeisi and Abdallah, 2013). Abu-Shanab and Pearson (2010) scrutinised the behavioural intention based on UTAUT and other factors: trust, anxiety, risk, and innovativeness. Recently, Al-Qeisi and Abdallah (2013) also reapplied UTAUT with website quality perceptions to predict the actual usage of Internet banking. Al-Majali, (2011) formulated risk, trust, awareness, and social influences as prerequisites of the main constructs in TRA to provide a clearer picture about customer intention to adopt Internet banking. The findings of these studies have contributed to the overall consciousness regarding the critical dominions of adoption of Internet banking in Jordan. However, the considerable relationship between behavioural intention and adoption has not been addressed; while both Abu-Shanab and Pearson (2010) and Al-Majali (2011) only considered behavioural intention, Al-Qeisi and Abdallah (2013) exclusively concentrated on the actual usage. In addition, the crucial role of trust is not confined only as a direct effect of behavioural intention but also it could play a considerable role in contributing to the value of using Internet banking and thereby mitigate the negative impact of perceived risk. Other important relationships such as facilitating conditions and performance expectancy have never been assessed by these studies. Moreover, despite the importance of intrinsic motivation as a critical predictor of the adoption of Internet banking (Lin and Hsieh, 2011), intrinsic motivation has not received any attention from prior studies regarding the Jordanian context. Therefore, this study aims to fill this important gap by proposing and examining a suitable and parsimonious conceptual model considering the abovementioned aspects and providing further understanding of the behavioural intention and adoption of Internet banking by focusing on Jordanian customers. The theoretical foundation selected and research hypotheses are discussed next.

3. Conceptual Model and Hypotheses Development

As UTAUT2 is precisely theorised to explain customer usage of technology (Venkatesh et al., 2012), it has been selected as a fitting theoretical foundation for the conceptual model. Furthermore, from an in-depth analysis of Internet banking studies, the fundamental constructs in UTAUT2 or captured constructs such as relative advantage, perceived behavioural control, and enjoyment have been recognised as

critical predictors in this vein (Lin and Hsieh, 2011; Shih and Fang, 2004; Tan and Teo, 2000). Other important factors such as TR and PR were unearthed and therefore are included as extensions of UTAUT2 in the same model. As shown in Figure 1, the conceptual model includes five determinants of BI. These determinants are PE, HM, FC, TR, and PR. Adoption behaviour was supposed to be predicted by both BI and FC. FC was proposed as the key predictor of PE while TR was formulated as a key determinant of PE, HM, and PR. The constructs' definitions and hypotheses development are demonstrated below.

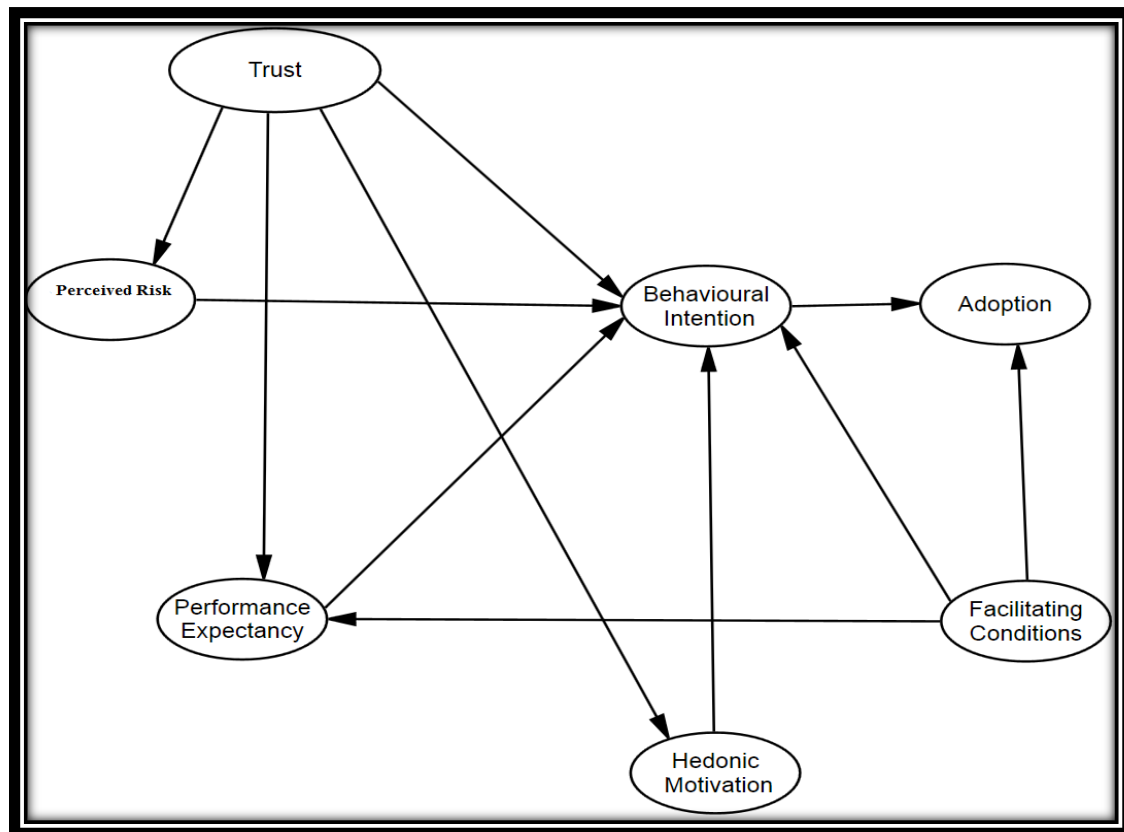


Figure 1: Proposed Theoretical Model of the Adoption of Internet Banking by Jordanian Customers (Venkatesh et al., 2003; Venkatesh et al., 2012; Gefen et al., 2003; Featherman and Pavlou, 2003)

Performance expectancy (PE)

Performance expectancy (PE) can be defined in terms of utilities extracted by using Internet banking such as: saving time, money and effort, more accessibility and customisation, and thereby is productive relative to the traditional encounter (Curran and Meuter, 2005; Venkatesh et al., 2003; Venkatesh et al., 2012). Therefore, either PE or its captured factors like usefulness and relative advantages have been widely recognised as fundamental determinants of behavioural intention toward Internet banking (Abu-Shanab and Pearson, 2010; Al-Somali et al., 2009; Black et al., 2002;

Celik, 2008; Cheng et al., 2006; Curran and Meuter, 2005; Eriksson et al., 2005; Foon and Fah, 2011; Kesharwani and Bisht, 2012; Kolodinsky et al., 2004; Lee, 2009; Martins et al., 2014; Nor et al., 2008; Pikkarainen et al., 2004; Riffai et al., 2012; Wang et al., 2003; Yeow et al., 2010). Accordingly, the following hypothesis is proposed:

H1: Performance expectancy will positively influence Jordanian customers' intention to adopt Internet banking.

Hedonic motivation (HM)

Hedonic motivation (intrinsic motivation) could be conceptualised as the feeling of cheerfulness and enjoyment which are stimulated by using Internet banking (Venkatesh et al., 2012). Hedonic motivation or perceived enjoyment as stated by Davis et al. (1992) has been asserted as a key predictor of technology acceptance particularly those related with customer context (Venkatesh, 1999; Venkatesh et al., 2012). Besides, perceived enjoyment was identified as the most considerable predictor of adoption self-service technology (Dabholkar et al., 2003). There have been a number of studies that have reported the important influence of intrinsic motivation such as fun, playfulness and enjoyment of the customers' intention to adopt Internet banking (Celik, 2008; Gan, et al., 2006; Lin and Hsieh, 2011; Pikkarainen et al., 2004; Riffai et al., 2012; Shamdasani et al., 2008). Hence, the following hypothesis is theorised:

H2: Hedonic motivation will positively influence Jordanian customers' intention to adopt Internet banking.

Facilitating conditions (FC)

Facilitating conditions are defined as “the degree to which an individual believes that an organisational and technical infrastructure exist to support use of the system” (Venkatesh et al., 2003, p.453). Indeed, using Internet banking usually requires a particular kind of skill, resources and technical infrastructure (Celik, 2008; Ramayah and Ling, 2002; Riffai et al., 2012; Sathye, 1999; Yeow et al., 2010) and these facilities are not usually free at customer context (Venkatesh et al., 2012). Therefore, facilitating conditions could play a pivotal role in enhancing or hindering both customers' intention and adoption of Internet banking as well as facilitating the utilities that are extracted from using online banking (Celik, 2008; Dabholkar and Bagozzi, 2002; Johnson et al., 2008; Lin and Bhattacharjee, 2008; Wang et al., 2003;

Wu and Wang, 2005; Yeow et al, 2010;). Thus, the forthcoming hypotheses postulated that:

H3: Facilitating conditions will positively influence Jordanian customers' intention to adopt Internet banking.

H4: Facilitating conditions will positively influence Jordanian customers' adoption of Internet banking.

H5: Facilitating conditions will positively influence performance expectancy.

Trust (TR)

Trust (TR) was conceptualised as “individual willingness to depend based on the beliefs in ability, benevolence, and integrity” (Gefen et al., 2003, p.161). Fundamentally, trust has been commonly documented as a crucial predictor of customer behaviour especially in the case of increasing uncertainty and risk (Mayer et al., 1995). Regarding Internet banking, a dynamic environment along with the disappearance of physical human interaction, customers have been found to largely depend on trust to lessen their concerns and to approve their decision to use the targeted system (Akhlaq and Ahmed, 2013; Eriksson et al., 2005; Gefen et al., 2003). Furthermore, trust enhances behavioural intention twofold; either directly or indirectly by way of contributing to the value pertained whilst using the targeted system such as perceived usefulness and perceived enjoyment (Gefen and Keil, 1998; Gefen et al., 2003). Regarding the Internet banking literature, TR has derived a considerable interest and is acknowledged as a crucial factor in determining BI directly or indirectly as discussed above (Abu-Shanab and Pearson, 2010; Akhlaq and Ahmed, 2013; Casaló et al., 2007; Eriksson et al., 2005; Flavián et al., 2006; Foon and Fah, 2011; Sukkar and Hasan, 2005; Riffai et al., 2012; Wang et al., 2003; Yousafzai et al., 2009). Therefore, four hypotheses are proposed related to TR as follow:

H6: Trust will positively influence Jordanian customers' intention to adopt Internet banking.

H7: Trust will positively influence performance expectancy.

H8: Trust will positively influence hedonic motivation.

H9: Trust will negatively influence perceived risk.

Perceived risk

Perceived risk could be defined as the likelihood of a customer suffering a loss in pursuit of favourable consequences when applying for Internet banking (Featherman and Pavlou, 2003; Pavlou, 2001). Progressively, perceived risk enjoys a particular interest from both the practitioner and scholars due to the decisive impact of customers' concerns and fears on customers' propensity to adopt Internet banking (Curran and Meuter, 2005; Featherman and Pavlou, 2003; Gerrard et al., 2006; Laukkanen et al., 2008). Furthermore, this role converts to be more dominant in the Internet banking area due to the high uncertainty, intangibility, heterogeneity and vague outcomes of using this channel (Al-Gahtani, 2011; Black et al., 2001; Celik, 2008; Curran and Meuter, 2007; Eriksson et al., 2005; Gan, et al., 2006; Gerrard et al., 2006; Jaruwachirathanakul and Fink, 2005; Kesharwani and Bisht, 2012; Kolodinsky, et al., 2004; Lee, 2009; Manzano et al., 2009; Martins et al., 2014; Ndubisi and Sinti, 2006; Nor et al., 2008). Accordingly, the following hypothesis conceptualises that:

H10: Perceived risk will negatively influence Jordanian customers' intention to adopt Internet banking.

Behavioural Intention

This is the strongest factor determining technology usage (Ajzen, 1991; Venkatesh et al., 2003; Venkatesh et al., 2012). The association between customer intention and adoption has been extensively supported by prior Internet banking studies (Jaruwachirathanakul and Fink, 2005; Kim and Forsythe, 2010; Shih and Fang, 2004) therefore the following hypothesis formulates that:

H11: Customer intention to adopt Internet banking will positively influence the Jordanian customers' adoption of Internet banking.

4. Methodology

In total, thirty-two scale items were adapted from prior information system literature to measure the underling constructs. Indeed, the main constructs of UTAUT2 (performance expectancy, facilitating conditions, hedonic motivation, and behavioral intention) were measured by scales adapted from Venkatesh et al. (2003) and Venkatesh et al. (2012). The scale for perceived risk was drawn from Featherman and Pavlou (2003) while trust was measured by scales from (Gefen et al., 2003). The seven-point Likert scale was used to measure these items with anchors ranging from

strongly agree to strongly disagree. Then adoption of Internet banking was measured by a matrix comprising of six common financial services provided by the Jordanian banks along with the frequency of using these services with anchors including seven-point items (never, once a year, several times a year, once a month, several times a month, several times a week, several times a day) (Venkatesh et al., 2012). Six closed-ended questions were devoted for demographic variables: age, gender, income, education level, Internet experience, and computer experience.

For the reason that this study was conducted in Jordan where Arabic is the native language, a translation and back translation between Arabic and English was conducted to overcome the impact of cultural and language differences (Brislin, 1976). A pre-test also was carried out by sending a draft of the questionnaire to a panel of experts who supported the scale validity, yet, they mentioned the necessity of rephrasing a few words or statements in a clearer manner. Then, a pilot study was carried out with thirty questionnaires distributed to Jordanian banking customers who asked to provide any notes regarding difficulties found in filling in the questionnaire. Their notes assured the author that the language used was simple and clear and that the length of the questionnaire was suitable. Moreover, an examination of scale reliability using Cronbach's alpha indicated that all undertaken constructs had alpha values exceeding their cut off value; that is, .70 (Nunnally, 1978), demonstrating that measures adopted were able to have an acceptable level of internal consistency and adequately satisfied the reliability criteria.

Assuming that there is no list of the banking customers in Jordan, a convenience sampling was deemed to be the most suitable sampling technique to be applied in the present research. Also, due to the spread of the Jordanian banking customers over a wide geographical area, the convenience sampling seemed to be a cost-effective sampling approach for the current study (Wilson, 2006). It is worth mentioning that the diverse profiles and characteristics of customers have been taken into account by using this method in order to draw a more generalisable result from the target population (Wilson, 2006). Moreover, several studies in the SST context have successfully used convenience samples (Wang and Shih, 2009; Howcroft et al., 2002; Curren and Meuter, 2005, etc.).

A field survey questionnaire was conducted to obtain the required data from a convenience sample of 500 Jordanian banking customers in two cities in Jordan (Amman and Al-Balqa`) over the months of June, July and August 2013. Three hundred and seventy-nine responses were received (75% response rate), yet, only three hundred and forty-eight of them (69.6%) were found valid for further statistical analyses. About 58 per cent of the respondents were male and 42% were female. The respondents' age ranged mostly between 18 and 40 (85%). Close to 83% of respondents have achieved bachelor degrees or above. About 50% of respondents' income ranged between 400 to 800 JOD per month (approx. £345-£690). Internet and computer experience exceeded three years for the vast majority of respondents (92%).

5. Findings

The structural equation modelling (SEM) with AMOS 21 was conducted to validate the proposed model and examine the research hypotheses (Byrne, 2010). Empirically, a two-stage approach of SEM which is a highly suggested method by Anderson and Gerbing (1988) was conducted. To begin with, a measurement model using a confirmatory factor analysis (CFA) was used to test the model fitness as well as the constructs' validity and reliability. Next, a structural model was applied to examine the hypothesised model (Hair et al., 2010).

By using AMOS 21, the CFA was employed with maximum likelihood (ML) estimates (Byrne, 2010). As shown in Table 1, the initial yielded fit indices reported that the measurement model has a poor fit due to the CMIN/DF being 2.779 (≤ 3.000), GFI= 86.3% ($\geq 90\%$), AGFI= 78.6% ($\geq 80\%$), NFI= 87.2% (≥ 0.900), CFI= 91.3% (≥ 0.900) and RMSEA= 0.072 (≤ 0.08). Accordingly, purifications and re-analysing of the measurements had to be done (Anderson and Gerbing, 1988). By looking at standardised regression weights (factor loading), standardised covariance matrix, and modification indices as listed on the AMOS output, this study was able to identify the problematic items that decreased the model fit. Therefore, two items of trust, two items of perceived risk, one item of performance expectancy, one item of hedonic motivation, one item of facilitating conditions, one item of behavioural intention and two items of adoption were figured out as redundant items, and consequently were removed. After that, the measurement model was run again and all the produced fit indices this time were found within their threshold values as follows: CMIN/DF was 1.754, GFI= 92.3%, AGFI= 89.7%, NFI= 94.5%, CFI= 97.6% and RMSEA= 0.047.

Accordingly, the modified measurement model has sufficient fit with observed data and no further modifications were required (Bagozzi and Yi, 1988).

With regard to the reliability and validity assessment, all remaining construct items had a factor loading above their cut off value of 0.50 and most of them were up 0.70 with a critical ratio as low as 1.96 at p less than 0.001 (Byrne, 2010). The average variance extracted (AVE) and composite reliability (CR) for all constructs reached their recommended level with values up to 0.50 for AVE ranging from 66 to 92 and higher than 0.7 for CR ranging as low as 72 and as high as 86. Thus, representing that, the scale measurement had satisfactory validity and reliability (Bagozzi and Yi, 1988). All things considered, the measurement model was able to satisfy the criteria of model fitness along with being able to be valid and reliable.

Fit indices	Cut of point	Initial measurement model	Modified measurement model
CMIN/DF	≤ 3.000	2.779	1.754
GFI	$\geq 90\%$	86.3%	92.3%
AGFI	$\geq 80\%$	78.6%	89.7%
NFI	$\geq 90\%$	87.2%	94.5%
CFI	$\geq 90\%$	91.3%	97.6%
RMSEA	≤ 0.08	0.072	0.047.

Table 1: Results of Measurement Model

In the second stage of SEM, the empirical data was subjected for further analyses at the start by examining the goodness of fit of the structural model and then testing the research hypotheses by looking at the path coefficients between the independent and dependent factors (Hair et al., 2010). The initial statistical findings strongly assured the goodness of fit structural model (CMIN/DF was 1.879, GFI= 91.4%, AGFI= 88.9%, NFI= 93.9%, CFI= 97% and RMSEA= 0.050). Besides, the structural model was able to explain there was about 68% and 32% of variance in both BI and adoption respectively. Moreover, as shown in Table 2, the yielded empirical results revealed that all path coefficients were recognised as significant. While the strongest path coefficient was between TR and HM ($\gamma=0.68$, $p<0.001$), the weakest one was between PR and BI ($\gamma=-.10$, $p<0.013$). Moreover, TR was the most influential factor predicting BI ($\gamma=0.34$, $p<0.001$). The path coefficient between BI and adoption was also strongly

significant ($\gamma=0.43$, $p<0.001$). Hence, all research hypotheses: H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11 were supported.

	Hypothesised path	Standardised estimate	Z-value	P-value	Supported
H1	PE→ BI	.16	2.916	.004	Yes
H2	HM→ BI	.13	2.351	.019	Yes
H3	FC→ BI	.26	4.129	***	Yes
H4	FC→ PE	.47	6.944	***	Yes
H5	FC→ Adoption	.17	1.969	.049	Yes
H6	TR→ BI	.34	5.272	***	Yes
H7	TR→ PE	.30	4.746	***	Yes
H8	TR→ PR	-.41	-7.055	***	Yes
H9	TR → HM	.68	13.382	***	Yes
H10	PR→ BI	-.10	-2.475	.013	Yes
H11	BI→ Adoption	.43	5.081	***	Yes
CMIN/ DF= 1.879; GFI = 91.4%, AGFI= 88.9%, NFI= 93.9%, CFI= 97%, RMSEA= 0.050					

Table 2: Standardised Estimates (Hypothesised Model)

6. Discussion

The aim of this study was to provide a clear picture regarding the most fundamental factors predicting the Jordanian customers' intention and adoption of Internet banking. Indeed, this study proposed a parsimonious model including three factors from UTAUT2: PE, HM, and FC along with PR and TR. This model was able to account for a large portion of variance in both BI (62%) and adoption (32%). Therefore, it provided strong evidence about the adequacy and suitability of UTAUT2 and TR and PR to predict the customers' penchant and adoption of Internet banking in Jordan.

Based on the path coefficient analyses, (see Figure 2), TR seems to be the most dominant determinant of customer intention ($\gamma=0.34$, $p<0.001$), in addition to TR

playing a crucial role in contributing to either PE or HM. These findings are in accordance with prior studies in online banking and information systems (Akhlaq and Ahmed, 2013; Yousafzai et al., 2009). This suggests that customers who perceive Internet banking will find it a trusty way to attain financial services; will have more inclination to use it; will form positive beliefs about the usefulness of Internet banking; and will find more fun in using Internet banking. Furthermore, TR has a considerable negative impact on PR meaning that customers are more likely to depend on their belief of trust to mitigate their apprehensions and concerns of using Internet banking as suggested by Kesharwani and Bisht (2012) and Yousafzai et al. (2010). In other words, this study empirically approved that the minimum level of PR was found among those customers who have a higher TR. In line with Venkateshs et al.'s (2012) proposition, PE, HM and FC were all recognised to have significant positive impact on customer intention. These findings have also been supported by prior studies of Internet banking (Abu-Shanab and Pearson, 2010; Celik, 2008; Lin and Bhattacharjee, 2008; Riffai et al., 2012). FC appears to be the strongest factor among the UTAUT2 constructs followed by PE. This demonstrates that Jordanian customers pay particular interest about the existence of facilities, resources, and skills that are required to use Internet banking successfully and effectively. In addition to this, the strong association between FC and PE indicates that the existence of important resources, information and skills along with a degree of compatibility facilitates accessing the benefits of using Internet banking, and accordingly, enhances the value existed in this technology. Similar findings in this regard were reached by Celik, 2008; Lin, 2009 and Wang et al., 2003.

As can be seen in Figure 2, PE has considerable influence on BI, which means that customers will have more willingness to accept Internet banking if they are able to perceive further value and advantages of adopting Internet banking. This relationship has been widely assured over the Internet banking studies (Abu-Shanab and Pearson, 2010; Al-Somali et al., 2009; Curran and Meuter, 2005; Eriksson et al., 2005). This association could be attributed to the fact that the unique nature of Internet banking provides customers with a wide range of financial services with further flexibility in terms of time and place, which in turn, accelerates the customers' perceived usefulness of adopting Internet banking. Pertaining to HM, statistical evidences have proved a positive and significant correlation between HM and BI, reflecting that the

likelihood of adopting Internet banking will increase among customers who see that using Internet banking is more entertaining, pleasurable and enjoyable. These findings have been strengthened in the area of online banking or SSTs in general (Celik, 2008; Gan et al., 2006; Lee et al., 2003; Lin and Hsieh, 2011; Pikkarainen et al., 2004; Riffai et al., 2012; Shamdasani et al., 2008). This could be due to the unique nature of Internet banking as a modern and novel technology in Jordan providing customers with higher value financial services, which leads customers to be more pleasurable and enjoyable when using this technology. As highly reported in prior literature (e.g. Venkatesh et al., 2003; Venkatesh et al., 2012), behavioural intention ($\gamma=0.43$, $p<0.001$) was found to be a dominant determinant of adopting Internet banking in Jordan followed by FC ($\gamma=0.17$, $p<0.049$).

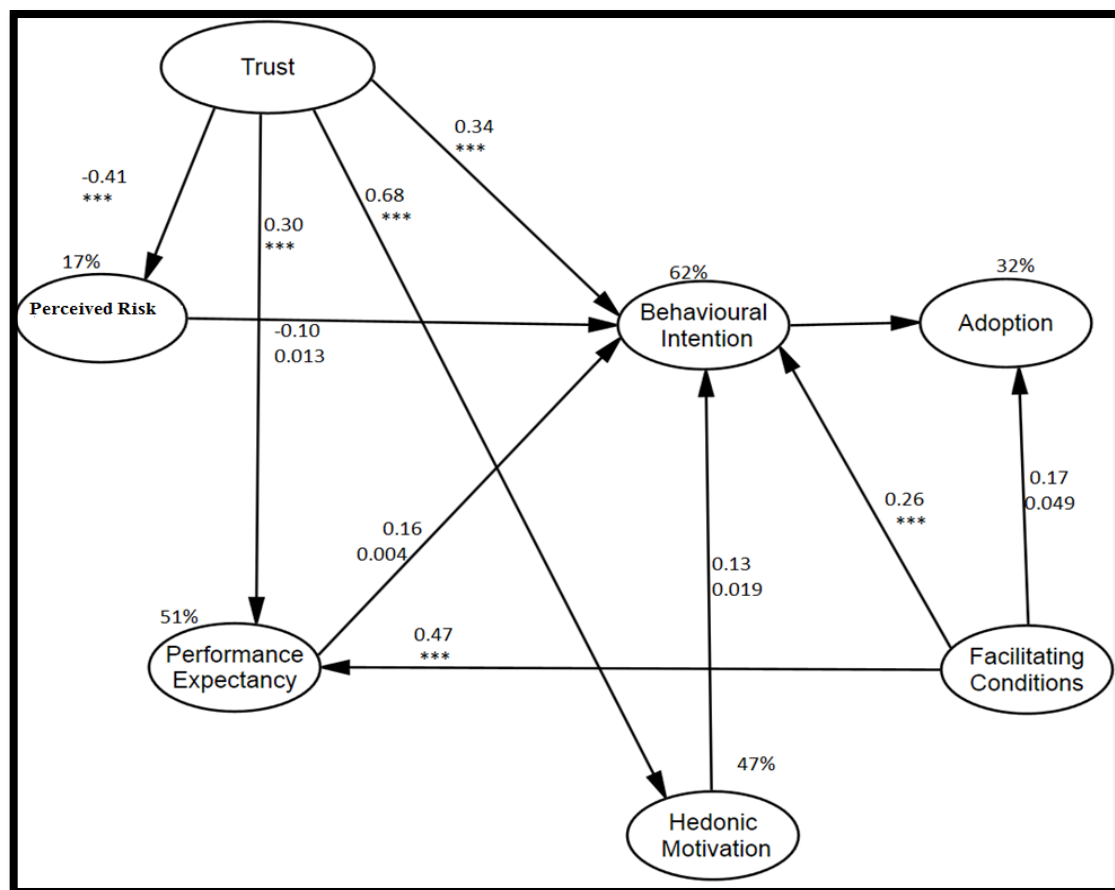


Figure 2: Validation of Structural Model

6.1 Contribution to Theory and Practice

There were theoretical and empirical privileges that were attained by this study. Firstly, by conducting UTAUT2 as a new model to explain the adoption of Internet banking in Jordan, this study expanded the applicability of UTAUT2 to new

technology (Internet banking). Jordan is a developing country and there is a dearth of literature related to this phenomenon. Secondly, the formation of TR and PR alongside the original constructs in UTAUT2 and the modification of new relationships between these constructs extended the theoretical horizon of UTAUT2. Statistical findings were empirically able to support choosing UTAUT2 as a suitable model to explain the customers' intention and adoption of Internet banking in Jordan.

In line with this current study's aim, findings provided further coverage and understanding regarding the salient aspects forming the Jordanian customers' intention to adopt or reject Internet banking. Hence, it is important to help Jordanian banks to develop a suitable marketing strategy that will guarantee an acceptable level of Internet banking adoption among Jordanian banking customers. Such results will allow an assessment of the overall Jordanian customers' intention to adopt Internet banking by permitting banks to identify the most suitable marketing strategy that will encourage customers to use Internet banking as a more convenient and innovative channel. Furthermore, findings permit a better understanding about the important role of intrinsic motivation (HM) and extrinsic utilities (PE) that customers expect from using Internet banking. This suggests that marketing campaigns should focus on the beneficial use of Internet banking such as saving time and cost, and a further convenience in getting the financial services. Besides, banks should emphasise the novelty and innovativeness that exists in Internet banking, which, in turn, enhances the customers' feeling of pleasure and playfulness associated with Internet banking. Such results also show the extent of how much the Jordanian customers pay interest for the issues regarding the existence of such important facilities. This permits the Jordanian banks to concentrate more on improving the technical and informational infrastructures that is needed to easily and effectively use Internet banking.

In addition, there is strong evidence of a pivotal role of TR and PR by creating a necessity to persuade customers that using Internet banking is trustworthy and less risky. This can be improved upon by conveying sufficient knowledge and information on how to properly and safely conduct Internet banking along with improving their websites' design (Gefen et al., 2003). Furthermore, it is necessary to pay particular interest to the aspects related to structural assurances such as legal and regulatory compliance, warranty documents, protocols, contracts and promises. Accordingly, it is vital to ease the customers' apprehension regarding the probability of fraud, hacking,

uncertainties that accompany Internet banking (Nor et al., 2008; Yousafzai et al., 2005). Jordanian banks could mitigate the negative influence of perceived risk by concentrating more on their brand position and reputation, and using a money-back guarantee policy in the case of fraud (Gan et al., 2006). By using actual users of Internet banking as a market gateway or as a reference group, it may persuade the reluctant customers that using Internet banking is not risky. In addition, maintaining certain normal situations of the Internet banking environment could enhance customers' trustworthiness and thereby mitigating the perceived risk (McKnight et al., 1998; Yousafzai et al., 2005).

7. Conclusions

Drawing upon UTAUT2, the current study proposed an integrated model comprising a set of interactive associations between the main constructs (PE, HM, FC, TR and PR). Then, by using empirical data extracted from 348 Jordanian banking customers, proposed a model that was statistically inspected by means of SEM. The findings strongly assured the validity of the proposed model to explore the customers' intention and adoption of Internet banking in Jordan. Also, the findings noted that PE, HM, FC, PR and TR are all fundamental predictors of BI. The findings were able to verify the effect of both BI and FC on the adoption of Internet banking as well. TR seems to be the strongest factor predicting BI either directly or indirectly via a mediating impact on all of PE, HM and PR. The findings then were used as a foundation to suggest some application guidelines to improve the adoption of Internet banking by Jordanian customers.

7.1 Limitations and Future Research Directions

Despite the fact that this study represents a fruitful attempt to explain the adoption of Internet banking in Jordan, it has some limitations. Initially, considering only Internet banking could mitigate the generalisability of the current findings to other online banking channels such as telebanking and mobile banking for each of these types have unique features and different life cycles. Therefore, future research should consider these channels along with conducting comparative study between them. It may help banks to choose the appropriate marketing strategy for each channel. Also, other important factors such as ease of use, monetary value, and social influences were not examined by the current study and therefore should be tested in the future to provide a further understanding regarding this problem. While this study concentrates on the

customers' intention and adoption of Internet banking in Jordan, customer satisfaction and customer retention as a consequence of using Internet banking will be valuable in future research directions as well. Further, a longitudinal study could provide further understanding regarding this problem and the extent of how much the effect of the proposed factors could be stable or change over time. Whereas the current study was applied at the banking context in Jordan as a developing country, future studies could look at the cultural and contextual differences among developed and developing countries. Other SST channels (e.g. online booking, mobile payment) should be considered in future researches too.

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